

Relationship of trait anger with quality of life and anger control among alcohol users

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ABSTRACT

Background: Abstinence and anger control are promoted as ways to improve quality of life. Trait anger has been seen as one casual factor for alcohol related aggression and poor quality of life. The present study assesses anger control, quality of life and its relation with trait anger among alcohol dependents, abstainers & social drinkers. **Material & Method:** 150 subjects (50 subjects in each group) in the age range of 20 - 45 years were taken for the study. Semi-structured interview schedule, State-Trait Anger Expression Inventory-2, WHOQOL-BREF were administered in individual setting. **Results:** Dependent alcohol users and abstainers reported the significant impact of alcohol use on family & occupational functioning. Quality of life has correlation with anger control (in/out), trait anger, temperament & reaction in the control & abstainers group, whereas quality of life has negative correlation with trait anger expression among the alcohol group. **Conclusions:** Alcohol use has been associated with the trait anger expression and poor quality of life. It has implications for promoting alcohol abstinence, in improving quality of life and in anger control.

Keywords: Trait Anger; Anger Control; Quality of Life

1. INTRODUCTION

Anger is a social emotion, its expression invariably has a consequences to social relations within a culture or society. Culture based expectations also influence the expression and control of anger. Indian participants use more introspective strategies like repression and rational self coping statements to manage anger provocation than their western counterparts [1]. Gender and location of participants also has a significant correlation with the anger expres-

sion index [2]. In a study comparing anger expression and control carried out on Iranian and Indian patients (200 in each group) using state trait anger expression inventory & daily hassel checklist. Iranian male students scored higher on anger expression index whereas Indian males scored higher on anger control [3]. Drug users experience anger more frequently than nonusers and they are more likely to feel less in control of their angry feelings. They are more apt to express such anger toward other persons or objects in their environment [4]. Alcohol interferes with those processes which are needed to control behaviour and act in a planful way to achieve the best outcomes in any situation, namely attention, abstracting relevant information, reasoning, problem-solving, planning, and self regulation [5] and one specific set of skills to which these processes are integral is social problem solving [6].

Participants with high trait anger are more prone to use alcohol and drugs [7]. Trait anger has an association with aggression among intoxicated men who reported low level of anger control [8]. Alcohol use was reported more among people with moderate levels of trait anger [9]. Abstinence, controlled or minimal drinking has positive impact on quality of life among alcohol users [10].

In a culture like India where abstinence is generally the desired goal, there is a need to understand the influence of alcohol on trait anger, anger control and quality of life. The present work assesses anger control, quality of life and its relation with trait anger among alcohol dependents, life time abstainers and social drinkers.

2. METHODS

2.1. Participants & Procedure

The study was reviewed and approved by the NIMHANS Ethics Committee. The total study sample comprised 150 subjects in the age range of 20 - 45 years. Group I consisted of 50 patients with active alcohol dependence drawn from both outpatient and inpatient settings. Group II consisted of 50 who had been diagnosed of

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alcohol dependence but currently maintaining abstinence from alcohol for the last three months. Group III comprised of 50 social drinkers (no lifetime use of more than 2 standard drinks per day). This group was drawn from the community (20 - 45 years of age and gender matched samples drawn from among the hospital staff, educational institutions and workplaces using a snowballing approach). Subjects who had organic disorders, poly substance use (except nicotine), psychosis or sensory deficits were excluded from the study. Each assessment session lasted about 30 minutes and all the subjects were assured of confidentiality.

2.2. Measurement

A Semi-structured interview schedule was developed by the investigators to obtain information about socio-demographic details, information about alcohol use, its relationship with anger and its effects on anger control. State-Trait Anger Expression Inventory-2 [11], WHOQOL-BREF [12] were used.

2.3. Statistical Analysis

It was carried out using percentage of score and factor analysis.

3. RESULTS

While 76% of social users and 68% of active alcohol dependent users perceived anger as a negative emotion, these differences were not statistically significant. A majority of the dependent users (52%), abstainers (46%) attributed anger to personal reasons (persisting irritation, frustration, negative attitude toward the alcohol users, decrease communication with others). 60% of the dependent users and abstainers experienced it as having a significant impact on the family (decrease communication with wife, frequent fights) and workplace area (loss of job and conflict with employers).

Factor analysis was carried out to understand the correlated factor in each of the three groups (**Table 1**). An eigen value greater than 1 was selected for the factor to

be considered and the correlation greater than 0.33 was considered for the rotated component matrices and the rotation was done using varimax method. In **Table 1**, Columns 1 to 3 is rotated matrix from the factor analysis for the control group. Three factors (trait anger, trait anger reaction and trait anger temperament) are seen to have a high correlation with total quality of life scores, the total quality of life alone explains 42.88% of the variability of correlation and the trait anger correlation (with anger control in and anger control out) explains 27.02% and therefore, a total of 69.9% of the variability is explained by the total quality of life scores and trait anger in the control group.

Columns 4 to 6 in **Table 1** are the rotated matrix from the factor analysis for the Abstainers group. Here two factors (trait anger, trait anger reaction) have a high correlation with total quality of life score, and this explains the 47.24% of the variability in the correlation. Trait anger is also highly correlated with the three factors (total quality of score, anger control out, anger control in) which explains 24.54% of the variability. Therefore two factors, viz. the total quality of life score and the trait anger score both explained most of the variability (71.78%) in the correlation matrix.

For the alcohol dependent group (Columns 6 and 7), it is only the trait anger reaction score which explain the correlation with the three variables (that is anger control out and anger control in and trait anger expression with a negative correlation). It is the trait anger reaction score which alone explain almost 50% of variability in the correlation matrix. If we consider the anger control out also as a factor. then the total variability explained would be 73.8%. Since the eigenvalue of the anger control out is (0.955) less than 1, this factor is not selected for the further analysis.

4. DISCUSSION

In this study, we found that the quality of life has a positive correlation with anger control (in/out), trait anger, temperament and reaction in the control and abstainers group, whereas quality of life has a negative correlation

Table 1. Factor analysis for three group controls, abstainers and alcohol (rotated matrix) for quality of life (QUL), trait anger, trait anger reaction, anger control out, anger control in & trait anger temperament.

Controls		Abstainers		Alcohol	
(1)	Total QOL (2)	Trait anger (3)	Total QOL (4)	(5) Trait anger (6)	(7) Total QOL (8)
Total QOL			Tot QOL	0.412	Tot QOL
Trait anger	0.962		Trait anger	0.918	Trait anger
Trait anger reaction	0.864		Trait anger reaction	0.963	Trait anger reaction
Anger control out		0.895	Anger control out	0.866	Anger control out
Anger control in		0.876	Anger control in	0.866	Anger control in
Trait anger temperament	0.882		Trait anger Temperament		Trait anger expression
					-0.584
					0.845
					0.827
					-0.507

with trait anger expression among the active alcohol dependent users. Dependent users and abstainers reported a significant impact of alcohol use on family and occupational functioning. This indicates that alcohol use influences both quality of life and anger control (in/out). Anger was perceived as negative emotion across the three groups.

Our findings have been corroborated by other studies as well. Interactive effect of trait anger and alcohol consumption on anger control was seen in the intoxicated state. Whereas same relationship was not found between alcohol consumption and trait anger in the self reported sober state [13]. Alcohol also exerts proximal effects on abusive behavior among individuals already prone to respond to conflict with increased anger [14]. Males who abuse alcohol experience and express more anger than males who do not abuse alcohol [15]. Alcohol users experience lower quality of life in comparison to non alcohol users [16]. Abstinence or moderate consumption also leads to improved quality of life [17]. It is also associated with long term recovery [18]. Longitudinal research has shown that early impulsivity is associated with both later offending & problem drinking and it is also related with poor executive functioning which in turn contributes to aggressiveness [19]. Thus, in a culture which promotes abstinence and anger restraint, alcohol use enhances the expression of trait anger. These finding have implications for psychoeducating people for abstinence from alcohol, its role in improving the quality of life as well as for anger control. Future research in this area should focus on male and female samples, trait anger expression and its relationship with alcohol use, resilience to stress, domestic violence, relation with relapse and psychological comorbidity.

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